SYSTEM, METHOD AND STORAGE MEDIUM FOR MEMORY MANAGEMENT

Abstract

A system for memory management including a tag controlled buffer in communication with a memory device. The memory device includes a plurality of pages divided into a plurality of individually addressable lines. The tag controlled buffer includes a prefetch buffer including at least one of the individually addressable li nes from the memory device. The tag controlled buffer also includes a tag cache in communication with the prefetch buffer. The tag cache includes a plurality of tags, where each tag is associated with one of the pages in the memory device and each tag includes a pointer to at least one of the lines in the prefetch buffer. Access to the lines in the prefetch buffer is controlled by the tag cache.